DRAFT

INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION

WOOLEY CREEK BRIDGE (2C-016) SEISMIC RETROFIT AND BRIDGE PIER REPAIR PROJECT SISKIYOU COUNTY, CALIFORNIA



November 2022

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1.0 PROJECT INFORMATION

Project Title:	Wooley Creek Bridge (2C-016) Seismic Retrofit and Repair Project.
Project Number:	BRLS 5902(080)
Project Location:	Salmon River Road Post Mile 3.77/Forest Hwy 93-1
Name of Property Owner:	Siskiyou County
Name of Applicant:	Siskiyou County Public Works
Assessor's Parcel Number(s)	033-130-160 & 033-270-010
Zoning:	Rural Residential 40 Acre Minimum (R-R-B-40)
Flood Hazard:	Zone X & A
Lead Agency:	Siskiyou County Public Works
Date Prepared:	November 1, 2022
Contact Person:	Kyla Burton
Phone Number:	530-842-8250

2.0 PROJECT DESCRIPTION

2.1 INTRODUCTION

The County of Siskiyou (County) proposes to implement the Wooley Creek Bridge Seismic Retrofit and Repair Project (proposed project) to correct seismic retrofit vulnerabilities and maintenance repairs. The bridge identification information is listed below:

BRLS-5902(080)

Wooley Creek Bridge (2C-016)

Salmon River Road (FH93) Mile Post 3.77

Latitude: 41°22'27.18"N Longitude: 123°25'44.47"W

The project will be funded by the Federal Highway Administration (FHWA) Highway Bridge Program, administered by the California Department of Transportation (Caltrans), District 2 Local Assistance Office. The National Environmental Policy Act (NEPA) procedural requirements have been met, the surveys and technical studies were performed to satisfy the requirements of NEPA and CEQA and will be referenced within this document.

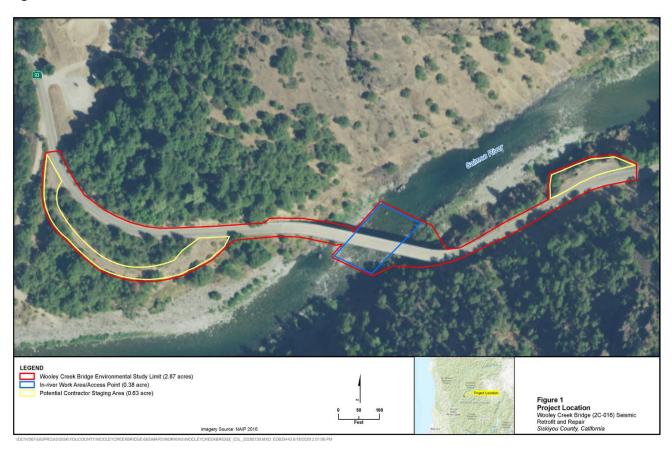
2.1.1 Existing Facility

The bridge is located on Salmon River Road (Forest Highway 93) approximately 3 miles east of Somes Bar, California, where it crosses the Salmon River (Salmon River Road Post Mile 3.77 Forest Highway 93-1) (refer to Figure 1, Project Location).

Wooley Creek bridge has vulnerabilities that require corrective seismic retrofit and maintenance repairs. The bridge is a four-span, 406-foot-long by 24-foot-wide, two lane bridge originally constructed in 1966 with a concrete deck supported on steel I-girders. The four spans are supported on two abutments and three interior piers. The outer piers are located on the banks of the Salmon River, and the middle pier (Pier 2) is located within the main river channel. Pier 1 and 3 are supported on spread footing foundations, and Pier 2 is supported by a pile cap founded on driven steel H-piles.

Prior to 2017 inspection reports, the overall and components (deck, superstructure, and substructure) condition rating were designed "good" and the bridge was assigned a sufficiency of 85.4 out of 100. Following the 2017 inspection, substructure and overall condition rating were downgraded to "poor" and dropped to 56.3. As a rule of thumb, FHWA uses an SR of less than 80 as the threshold where federal funding may be available for bridge rehabilitation an SR of less than 50 as the threshold where federal funding may be available for bridge replacement. This project is needed to protect bridge users and extend the useful life of the structure.

Figure 1



2.2 PROJECT PURPOSE AND NEED

2.2.1 Purpose

The purpose of the proposed project is to implement seismic retrofit measures, perform general maintenance repairs, and repair an in-river pier damaged by long-term river bedload abrasion. Seismic retrofit measures are necessary to prevent collapse during a significant seismic event. The damaged pier exacerbates the bridge's seismic vulnerability and is affecting its overall condition rating.

2.2.2 Need

The project is needed to protect bridge users and extend the useful life of the structure.

2.3 CONSTRUCTION DETAILS

This section discusses how construction would occur at the proposed project site. Although the majority of the work would be at deck level or at the abutment faces, column repair would require river access for repair of Pier 2. No excavation activities or vegetation removal are anticipated. A preliminary design drawing is shown in Appendix A.

In-water Work and Temporary Dewatering

In-water work would be conducted from the bridge deck by lowering construction equipment, materials, and workers from above during the period of the lowest river flows. Lowest river levels typically occur approximately July through September.

Step 1: The contractor would mobilize on the bridge above the river and prepare to establish the work area in the river channel below.

Step 2: The contractor would begin lowering workers, equipment, and materials from above to a temporary staging area on a sandbar located on the east side of the bridge. The sandbar staging area would be used to support installation of a cofferdam around the in-river pier; a portion of the staging area may also be used to filter water pumped from the dewatering system used for work on the pier (see Step 5). This staging area would be approximately 40 feet by 30 feet (1,200 square feet). Trimming of willow shrubs would occur in this area to accommodate the settling pond and staging of personnel and equipment.

Step 3: Before the cofferdam can be installed and dewatered, the contractor would need to remove a small amount of cobble and debris that has deposited on the flat concrete pile cap. A clean surface is needed to create a watertight seal with the concrete and cofferdam. This step would take approximately one day to complete. The work would occur in flowing water, with minimal turbidity anticipated due to the small work area and stream substrate composition. The contractor would be required to follow State and federal permit and approval requirements.

Step 4: Once the pile cap is cleaned, the contractor would install the cofferdam. It is likely the cofferdam would consist of a simple, cost-effective material such as sandbags with plastic liner, some type of large-diameter plastic or metal pipe, or possibly an inflatable temporary cofferdam (such as, Aquadam). The cofferdam means and methods would be left to the contractor's discretion, with the only exclusion that sheetpile driving (sheet-pile cofferdam) or any other percussive pile driving would not be allowed. Temporary access between the cofferdam and the staging area could occur by placing large woven polypropylene bags filled with gravel (sometimes referred to as "supersacks") in the riverbed, or by constructing a temporary gravel berm in the riverbed to support a footbridge from the streambank to the cofferdam, or both. A minor turbidity pulse associated with the placement of gravel in the channel would be expected. The imported gravel would be washed, spawning-size gravel (¼ inch to 5 inches in diameter), consisting of uncrushed, rounded river rock with minimal sharp edges. The gravel would remain in the riverbed following construction if allowed by resource agencies. If material is allowed to be left in the channel, the height of the berm would be reduced to the

summer water level by spreading the material, and breaches would be made in the berm so that streamflow is not redirected or obstructed when flows rise in the fall following construction. Temporary culverts, if used to pass flow through the berm, would be removed following construction.

Step 5: The contractor would perform dewatering using a small-diameter pump. Water could be discharged to a settling pond in the sandbar staging area or filtered by use of a filtration system lowered to the sandbar staging area, prior to discharge. The Regional Water Quality Control Board (RWQCB) is responsible for establishing the water quality standards and regulating discharges to ensure compliance with the water quality standards. Water would meet minimum water quality standards prior to being discharged. Options for discharge of water would be developed in consultation with RWQCB prior to construction.

Step 6: The cofferdam would remain dewatered throughout construction and would offer secondary containment to protect aquatic resources.

Step 7: The contractor would perform the repair work using concrete patching materials and steel plating within the dewatered cofferdam.

Step 8: Once the work is complete, the contractor would remove all materials from within the cofferdam and remove all cofferdam materials from the river channel. It is anticipated that fluvial action will move native material into the small voids that remain following construction, and additional backfilling around the column on the pile cap would not be necessary.

Step 9: Finally, the contractor would demobilize materials from the sandbar staging area and ensure original grade and existing conditions are restored.

Right-of-Way

The project site is within the existing Siskiyou County easement and adjacent to Salmon River Road.

Construction Staging

Contractor staging would be located in three possible locations, as described below:

- 1. The old highway alignment, a 60-foot-wide 1913 public highway west of the bridge
- 2. An existing turnout along Salmon River Road just east of the bridge
- 3. A temporary staging area on a vegetated sandbar located on the east side of the bridge

The construction contractor would be responsible for bringing in and removing materials and equipment. The materials and equipment would likely be stored in the staging areas.

Traffic Management

Traffic on the bridge would be limited to just one lane during construction to allow workspace for the contractor. Materials delivery could require closure of both lanes for short durations (possibly up to a couple of hours on occasion). No nighttime work is anticipated. Work would be limited to daytime hours, and both lanes would be open to traffic outside of normal work hours.

Construction Equipment

The construction equipment required for the proposed project is anticipated to include the following:

- One hydraulic truck crane
- One front-end loader
- One dump truck
- One water truck (for dust control)
- One tank truck (for dewatering collection, an alternate to a sediment pond)
- Concrete pumping equipment and trucks
- Portable generators
- Portable air compressors
- Diesel light plant(s) as needed

Permits and Approvals

Proposed work activities would require permits from the California Department of Fish and Wildlife (1602 Streambed Alteration Agreement), Regional Water Quality Control Board (401 Water Quality Certification), and the U.S. Army Corps of Engineers (404 Nationwide Permit).

Construction Schedule

The project would take approximately 2 to 3 months to construct from start to completion (extending between August and October). Construction is anticipated to begin as early as August 2023 depending on durations for completing environmental documentation and permitting. Time required to complete the documentation and secure permits could push construction out to summer 2024.

3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Less than Significant Impact with Mitigation Incorporated" as indicated by the checklist on the following pages.

	☐ Agriculture and Forestry Resources	
⊠ Biological Resources	□ Cultural Resources	☐ Energy
☐ Geology /Soils	☐ Greenhouse Gas Emissions	
	☐ Land Use / Planning	☐ Mineral Resources
☐ Noise	☐ Population / Housing	☐ Public Services
□ Recreation		☐ Tribal Cultural Resources
☐ Utilities / Service Systems		

3.1 DETERMINATION

	On the basis of this initial evaluation:	
	I find that the proposed project COULD NOT NEGATIVE DECLARATION will be prepared.	have a significant effect on the environment, and a
X		nave a significant effect on the environment, there will evisions in the project have been made by or agreed to IVE DECLARATION will be prepared.
	I find that the proposed project MAY have ENVIRONMENTAL IMPACT REPORT is require	a significant effect on the environment, and ared.
	unless mitigated" impact on the environment, but in an earlier document pursuant to applicable leg	obtentially significant impact" or "potentially significant at least one effect 1) has been adequately analyzed all standards, and 2) has been addressed by mitigation escribed on attached sheets. An ENVIRONMENTAL are only the effects that remain to be addressed.
	potentially significant effects (a) have been analy DECLARATION pursuant to applicable standard	s, and (b) have been avoided or mitigated pursuant to ncluding revisions or mitigation measures that are
_	Signature	Date
•	.0	

4.0 CEQA ENVIRONMENTAL CHECKLIST

This checklist identifies physical, biological, social, and economic factors that might be affect by the proposed project.

	<u>VESTHETICS</u> — Except as provided in Public Resources de Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista?				\boxtimes
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

Substantiation for Section I. a), b), c), and d):

- a) The existing bridge structure is already present within the project area. The proposed project would not be introducing a new structure or have an effect on a scenic vista.
- b) Salmon River Road is not designated as a state scenic highway. The proposed project would not introduce any elements that would degrade the existing visual character or quality of the site or surrounding area.
- c-d) A Visual Impact Assessment was completed for the project, the project would not change portion of the bridge visible to motorists, bicyclist or pedestrians along the roadway or bridge, or create vision changes to the environment. The project would have short-term (2-3 months) visual impacts during construction work; however, these impacts would be temporary and cease upon completion of the project. Visual impacts would be less than significant.

II. AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Ass	nge Assessment Project and the Forest Legacy sessment project; and forest carbon measurement ethodology provided in Forest Protocols adopted by a California Air Resources Board. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				
	Substantiation for Section II. a), b), c), d), and e): a-e) The project site is located within the Siskiyou Cou Klamath National Forest. Work would take place easement and would have no impact on agricultu conflict of zoning, loss of or conversion of forest agricultural use.	within the Coural or forestr	ounty-owned ro ry resources. Th	adway ere is no	
TTT	AID OHALITY Where every the label the significance	Potontially	Loss Than	Loce Than	No

III.	AIR QUALITY Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?				\boxtimes
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				
c)	Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

Substantiation for Section III. a), b), c), and d):

- a) The construction phase of the project may result in a minor net increase in pollutant, the emissions would be temporary and would cease when construction is completed. Air pollution control would conform to Caltrans Standard Specifications, which state that the contractor shall comply with all applicable air pollution control rules, regulations, ordinances, and statues.
- b) Siskiyou County is currently a state "non-attainment" area for particulate matter (PM10). Construction activities associated with the proposed project would result in a relatively minor net increase in PM 10, which would be considered a less than significant impact. In addition to adhering to Caltrans Standard Specifications for air quality, implementation of dust shall be controlled during construction activities.
- **c-d)** Although the project would result in short-term construction-related emissions the proposed project would not expose sensitive receptors to substantial pollutant concentrations or create substantial objectionable odors.

***	PIOLOGICAL PERCUIPOES W. LLII.	Data attaut.	Lana Thana	Lasa Thana	NI -
IV.	BIOLOGICAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Services?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Services?				
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state				

Substantiation for Section IV. a), b), c), d), e) and f):

a-c) Reports and studies determined that the project would have few impacts on the natural environment. However, a portion of the Biological Study Area (BSA) falls within the Salmon River. This area has the potential to contain special-status species, but construction-related disturbances in these areas would be limited in size and scope and impacts in these areas resulting from the project would be avoided or minimized.

Biological field surveys were conducted to assess the existing environment, gather information on the potential presence of status species, and determine potential project level impacts with regard to biological resources. Record searches of the project area including the review of numerous databases, species list (Appendix B) and maps, as well as visits to and/or contacts with relevant agencies has been conducted for the project.

Biological reports completed for the proposed project are as follows:

- Natural Environmental Studies Report (NES) covering both (State and Federal Species)
- Aquatic Resource Delineation Report (ARDR)
- Biological Assessment (BA) Concurrence Letter received from NOAA Fisheries
 (Appendix C) that the project may affect but is not likely to adversely affect CONCC
 coho salmon listed as threatened and critical habitat designated under FESA.
 Similar to SONCC coho the proposed project is not likely to result in take of juvenile
 and adult UKTR Chinook salmon.

Project features that protect water quality and the natural environment would be incorporated into the contract documents. These project features would reduce impacts on habitats and protected species. Additionally, species-specific avoidance and minimization measures (5.0 Environmental Commitments and Mitigation Measures) would be implemented to protect coho and Chinook salmon

- e) There are no conflicts with any local policies or ordinances protecting biological resources.
- f) There are no conflicts with any local, regional or state habitat conservation plans.

V.	<u>CULTURAL RESOURCES</u> Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				\boxtimes
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				\boxtimes
c)	Disturb any human remains, including those interred outside of formal cemeteries?				\boxtimes

Substantiation for Section V. a), b), and c):

a-b) An Archaeological Survey Report (ASR) was completed for the project. The ASR consists of a cultural resource inventory included record searches, archive and literature research, Native American outreach and consultation, and an intensive pedestrian survey. It was determined that the project would not have an adverse change in the significance of a historical resource or archaeological resource.

c) Per the ASR there is a very low potential for buried archaeological resources given past disturbance, shallow soil, and steep rocky slopes within the project area. If during ground disturbing activities, any human remains or other archaeological discoveries are encountered, all activities shall halt and a qualified archaeologist shall be contacted to evaluate the find.

VI.	ENERGY Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				\boxtimes

Substantiation for Section VI. a) and b):

- a) Construction-related energy consumption would be temporary and not a permanent new source of energy demand and demand for fuel would have no noticeable effect on peak or baseline demands for energy. In addition, the proposed project would not increase capacity. Therefore, the project would not result in an inefficient, wasteful, and unnecessary consumption of energy.
- b) The project would not obstruct a state or local plan for renewable energy or energy efficiency. The overall project would have no impact to energy.

VI	I. GEOLOGY AND SOILS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving?				\boxtimes
	(1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
	(II) Strong seismic ground shaking?				\boxtimes
	(III) Seismic-related ground failure, including liquefaction?				\boxtimes
	(IV) Landslides?				\boxtimes
b)	Result in substantial soil erosion or the loss of topsoil?				\boxtimes
c)	Be located on a geologic unit or soil that is unstable, or		-	-	

	that would become unstable as a result of the project, and potentially result in on-or-off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		\boxtimes
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?		\boxtimes
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?		
f)	Directly or indirectly destroy unique paleontological resource or site or unique geological feature?		\boxtimes

Substantiation for Section VII. a), b), c), d), e) and f):

a)

- i) The project site is located in the Klamath Geologic Province of Northern California and a review of the U.S. Geological Survey (USGS) fault and fold database for the Project vicinity indicates that no faults are known to pass through the Project site. The Salmon River Canyon is composed of metasedimentary rocks of the Paleozoic era. Canyon slopes are very steep, ranging from 50 to 90 percent. The river channel is characterized by coarse alluvium with numerous bedrock exposure. Soils in the area are generally shallow, and rock outcrops are common.
- ii) All of Siskiyou County is within Uniform Building Code Seismic Zone 3, which is an area of moderate seismic movement that could cause minor to moderate structural damage in the event of seismic activity. Adherence to the Uniform Building Code standards for seismic designation Zone 3 during construction activities would minimize potential impacts to less than significant levels.
- **iii)** The risk of seismically-induced ground distortion appears low owing to the low level of ground shaking and lack of seismic faults.
- iv) The project is not located in an area that contains known landslides, the project would have no impact to geology and soils.
- b) During Construction work, the best available technology shall be employed for erosion control to minimize soil erosion and reduce this impact to a less than significant level.
- c) The risk of seismically induced ground distortion at this location appears low and is thus, less than significant risk.
- d) All of Siskiyou County is within Uniform Building Code Seismic Zone 3, which is an area of moderate seismic movement that could cause minor to moderate structural damage in the event of seismic activity. Seismic retrofit and pier repair will mitigate the vulnerabilities which could potentially lead to collapse during a significant seismic event.
- e) Construction would necessitate the provision of restroom facilities. This need would be fulfilled through the use of portable toilets. As a result, no septic systems or permanent restroom facilities would be employed. No impacts are anticipated.
- f) The project will not directly or indirectly destroy unique paleontological resource or site or unique geologic feature.

VI	II. <u>GREENHOUSE GAS EMISSIONS</u> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\boxtimes	
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

Substantiation for Section VIII. a) and b):

a-b) The proposed project would not conflict with any adopted plans, policies, or regulations adopted for the purpose of reducing greenhouse gas emissions. By the adoption of Assembly Bill (AB) 32 and Senate Bill (SB) 97, the State of California established GHG reduction targets and has determined that GHG emissions as they relate to global climate change are a source of adverse environmental impacts in California. AB 32, the California Climate Solutions Act of 2006 (see Statutes 2006, Chapter 488, enacting Health and Safety Code, Sections 18500-38599), establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. The impact that GHG emissions have on global climate change does not depend on whether the emissions were generated by stationary, mobile, or area sources, or whether they were generated in one region or another. Thus, consistency with the state's requirements for GHG emissions reductions is the best metric for determining whether the proposed project would contribute to global warming. In the case of the proposed project, emissions associated with the construction at the site would be of a limited scope, duration, and does not increase roadway capacity, no long-term increase in operational GHG emissions is anticipated. Construction emissions would be minimal, and further reduced by implementing Caltrans Standard Specifications and complying with construction best management practices and all air district rules, regulations, and ordinances for air quality.

IX.	HAZARDS AND HAZARDOUS MATERIALS Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes	
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result				\boxtimes

	would it create a significant hazard to the public or the environment?		
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?		
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?		

Substantiation for Section IX. a), b), c), d), e), f), and g):

- a) The proposed project would not increase traffic capacity or increase the level of hazardous waste transport within the project area.
- b) The project would involve the use of hazardous materials (i.e., petroleum-based fuels) and, therefore could expose the environment to significant hazards. Construction specifications shall include the measures to reduce potential impacts associated with accidental spills of pollutants (i.e., fuels, oil, grease, etc.) to vegetation and aquatic habitat resources within the project area.

Prior to bridge deck work the contractor will be required to perform an Initial Site Investigation (ISA) for Asbestos Containing Material (ACM), Treated Wood Waste (TWW), and Lead Containing Paints (LCP).

- If ACM is present it would be treated in accordance with the Caltrans Standard Specifications, including requiring the contractor to be notified as to the presence of suspected ACM. ACM removal will be conducted by a licensed and certified asbestos abatement contractor. The contractor will be required to prepare work plans, health and safety plans, conduct site investigations, and prepare site investigation reports for Caltrans review and approval. The project would have a less than significant impact related to hazards and hazardous materials.
- If TWW is present within the project limits in the form of Metal Beam Guard Rail and sign posts. If TTW is generated during this project, the storage and disposal would be in accordance with Caltrans Standard Specifications.
- If LCP is present a Lead Compliance Plan would be prepared and implemented to address appropriate lead removal related to LCP including temporary storage, testing, and transportation to an appropriate disposal facility.
- c) There are no schools within one-quarter mile of the project site.
- d) Based on existing and past land uses, the project site is not known to support a listed hazardous materials site.
- e) The project site is not located in area associated with an airport land use plan, nor is it located within 2 miles of a public airport. As a result, the project would not result in a safety hazard to the public. The project is not located within the vicinity of a private airstrip and would not result in a safety hazard to the public.
- f) The project is not anticipated to impair implementations of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

g) The 2-3 months of construction work that will be performed on the existing bridge would not increase threats to humans from wildfire. The intent of this project is to provide a safer bridge for all users, including emergency equipment and personnel.

X.	<u>HYDROLOGY AND WATER QUALITY</u> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surface, in a manner which would:				
	(1) result in substantial erosion or siltation on-or off-site;				
	 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or offsite; 				
	create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
	(IV) impede or redirect flood flows?				\boxtimes
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				\boxtimes
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

Substantiation for Section X. a), b), c), d), and e):

- a) A Water Quality Assessment Report and Location Hydraulic Study were completed for the project that included avoidance and minimization measures that will be implemented during construction. Construction and operation of the proposed project will not violate any water quality standards or waste discharge requirements set forth by the North Coast RWQCB.
- b) Construction and operation of the proposed project would not decrease or interfere with local groundwater supplies. The project will not impede on the basin sustainable groundwater management plan.
- c) Construction activities associated with the proposed project are not anticipated to substantially alter the existing drainage pattern of the site in a way that would result in erosion and sedimentation downstream. Water control and erosion control measures have been incorporated into the project and will be implemented during construction of the

- proposed project. In-channel construction work will be conducted in accordance with all measures contained in permits or associated with agency approvals.
- d) Project activities are not anticipated to expose the public or structures to a significant flooding risk. The proposed project would not result in inundation due to seiche, tsunami or mudflow.
- e) The project would have no effect on groundwater supplies or groundwater recharge areas because it would not use or release groundwater during either construction or operation of the project. In addition, no excavation or stockpiling of hazardous materials would occur for this project, no impact on groundwater are anticipated.

XI.	LAND USE AND PLANNING Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Physically divide an established community?				
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				

Substantiation for Section XI. a), and b):

- a) The proposed project involves the seismic retrofit and repair of an existing bridge structure and would not divide an established community.
- b) Construction of the proposed project is consistent with Siskiyou County General Plan.

XI	I. <u>MINERAL RESOURCES</u> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				

Substantiation for Section XII. a) and b):

- a) Existing gravel mining activities do not occur at this location. It is unlikely that the site would be considered an important aggregate resource.
- b) No locally important mineral resource recovery sites are located with the project site.

XI	II. <u>NOISE</u> Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b)	Generation of excessive groundborne vibration or groundborne noise levels?				\boxtimes
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

Substantiation for Section XIII. a), b), and c):

- a) Noise from construction and operation of the Wooley Creek Bridge is not anticipated to exceed standards established in the Noise Elements of the General Plan. Construction activities will be scheduled between 7:00 AM and 7:00 PM, Monday through Sunday.
- b) The proposed project is not anticipated to result in a permanent (on-going) increase in ambient noise, since traffic levels would not increase as a result of the project. Construction associated with the project could generate temporary ambient noise that is discernibly higher than existing noise levels within the project area. To protect fish and wildlife, no sheet-pile driving or any other percussive pile driving would be allowed.
- c) The proposed project is not located within two miles of a public airport nor is it with an area subject to an airport land use plan. As a result, people would not be exposed to excessive noise levels specific to airplane traffic. The proposed project is not located near a private airstrip. The project area is rural and has few receptors present. The proposed project would have a less than significant impact related to noise and vibration.

XI	V. <u>POPULATION AND HOUSING</u> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				\boxtimes

Substantiation for Section XIV. a) and b):

- a) Seismic retrofit and repair of the existing bridge pier would not induce substantial population growth.
- b) Existing housing will not be displaced by the project and no replacement housing would be required. No people would be displaced as a result of the proposed project nor would replacement housing be required.

XV	. <u>PUBLIC SERVICES</u> – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	Fire protection?				
	Police protection?				\boxtimes
	Schools?				\boxtimes
	Parks?				\boxtimes
	Other public facilities?				

Substantiation for Section XV. a):

a) The proposed project would not result in substantial adverse impacts on public services, including fire protection, police protection, schools, parks and other public facilities.

Because the project is a seismic retrofit and pier repair, it would not generate the need for additional fire, police, schools, parks, or public facilities. The proposed project will provide an improved and safer bridge across the Salmon River.

XV	I. <u>RECREATION</u> – Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				

Substantiation for Section XVI. a) and b):

- a) The proposed project would not increase the level of use at existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- b) No recreation facilities would be constructed as part of the project.

XV	II. <u>TRANSPORTATION</u> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?				
b)	Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision(b)?				\boxtimes
c)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
d)	Result in inadequate emergency access?				

Substantiation for Section XVII. a), b), c), and d):

- a) The proposed project will not have a conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities.
- b) The project would not conflict or be inconsistent with CEQA Guidelines.
- c) The proposed project would not result in the creation of sharp curves, dangerous intersections, or incompatible uses. The project is designed to provide a safer bridge across Salmon River.
- d) No adverse effect on emergency access is anticipated.

XVIII. TRIBAL CULTRUAL RESOURCES Would the project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				\boxtimes
	 Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources 				\boxtimes

Code Section 5020.1(k), or		
(II) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criterial set forth in subdivision pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 In applying the criteria set forth in subdivision (c) of Public Resources Code 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		

Substantiation for Section XVIII. a):

a) The project would not have a substantial adverse change in significance of a tribal cultural resource. However, for the purpose of seasonal ceremonies conducted by the tribe, the Klamath National Forest periodically limits public access to the Salmon River in the vicinity of the project during predetermined times of the year. To avoid any impacts on traditional tribal ceremonies and rituals, it was agreed upon by the Karuk Tribe, Siskiyou County, and Caltrans that any work occurring on the project between May 1 and August 1 would require close coordination with the Karuk Tribal Historic Preservation Officer and the Ihuk ceremonial leaders to determine which (if any) days would require ceasing operations to protect the solitude of ceremonial practitioners conducting Ihuk or associated ceremonies. Per the Archaeological Survey Report and Tribal consultation there are no known resources of tribal cultural importance within the project site.

XI	X. <u>UTILITIES AND SERVICE SYSTEMS</u> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?				
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				\boxtimes
c)	Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
d)	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				\boxtimes

Substantiation for Section XIX. a), b), c), d), and e):

- a) The construction and operation of the proposed project would not impact wastewater treatment, storm water drainage, electric power, natural gas, telecommunication facilities or solid waste services. Wastewater generated during construction of the proposed project would be disposed of properly by the contractor as required by the State and Federal permitting agencies.
- b) The project would have no impacts on water supplies during construction or in the foreseeable future. No new or expanded water entitlements will be required for the proposed project.
- c) Construction and operation of the proposed project would not result in a determination by the wastewater treatment provider necessitate the construction of a new wastewater treatment plant, nor would it require the expansion of existing treatment facilities. The proposed project does not include a wastewater treatment component.
- d) The proposed project is not likely to generate solid waste in amounts that would adversely affect the existing capacity of the local landfill.
- e) Any solid waste generated by the proposed project would be disposed of at an approved landfill, in compliance with local, state, and federal regulations pertaining to solid waste disposal.

XX	. <u>WILDFIRE</u> —If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				\boxtimes
b)	Due to slope, prevailing winds, and other factors exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risks or that may result in temporary or ongoing impacts to the environment?				
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				

Substantiation for Section XX. a), b), c) and d):

- a) The proposed project would not impair an adopted emergency response or emergency evacuation plan.
- b) The proposed project would not alter the risk or impacts to area residences from wildland fires as compared with the existing conditions. The proposed project would be constructed in approximately 2-3 months and would not require road closures or detours. Because the

- bridge work would improve the integrity of the existing bridge, it would improve its reliability for use during an evacuation.
- c) The proposed project would not require installation or maintenance of associated infrastructure that may exacerbate fire risks or that may result in temporary or ongoing impacts to the environment.
- d) The nature of the project (.i.e., seismic and pier repair) would not exacerbate wildfire risks or secondary risks associated with wildfire such as flooding, landslides or slope instability.

XX	II. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

Substantiation for Sections XXI. a), b), and c):

- a) The project could result in temporary impacts to sensitive resources. With mitigation measures incorporated into the project, impacts can be avoided and minimized to less than significant.
- b) The project would include seismic retrofit and bridge pier repair and would not introduce new development into a previously undeveloped area. Impacts associated with the project will be limited to construction phase for the most part and can be fully mitigated for at the project level. As a result, cumulative impacts are considered to be less than significant.
- c) Measures will be implemented to avoid and minimize potentially adverse effects to humans generated by the construction and operation of the proposed project.

5.0 ENVIRONMENTAL COMMITMENTS AND MITIGATION MEASURES

Per the Biological Assessment, Letter of Concurrence from NOAA Fisheries, Natural Environmental Study (State and Federal Species) and the Water Quality Study the following requirements will be incorporated in the construction contract documents and final project design:

Biology	Site Layout and Flagging: Delineate construction areas and environmentally sensitive areas (areas containing sensitive habitats adjacent to or within the project limits for which physical disturbance is not allowed); these areas will be shown on the final construction plans. Prior to the start of construction, installation of fencing, flagging, or other approved means of delineation will be installed to prevent encroachment of personnel and equipment into sensitive areas during construction. When feasible, staging, storage, and parking areas will be located on paved or graveled surfaces within the County right-of-way and away from any designated environmentally sensitive areas to minimize construction impacts on protected resources. The fencing, flagging, or other material will be removed when construction activities are complete in the immediate vicinity.
Biology	Staging, Storage, and Stockpile Areas: Designate and use staging, storage, and stockpile areas to ensure that hazardous materials do not enter waterbodies. Do not dispose of non-native materials in the functional floodplain. Restore temporarily disturbed pervious areas.
Biology	Worker Environmental Awareness Training: Prior to construction, construction crews will be required to attend a training. The training will address special-status species that have the potential to occur within the project area, conservation measures, terms of the Biological Opinion, project permits, agreements, certifications, environmentally sensitive areas, and other related matters.
Biology	Pre-construction Survey and Species Rescue: A qualified biologist will conduct preconstruction species surveys for foothill yellow-legged frog. Visual encounter surveys will be conducted immediately before ground-disturbing activities. Suitable habitat within the project footprint, including refugia habitat (such as under shrubs, downed logs, small woody debris, burrows, etc.) will be visually inspected. If a foothill yellow-legged frog is observed, the individual will be evaluated and relocated in accordance with the protocol outlined below.
	Should foothill yellow-legged frogs be encountered in the BSA during construction and could be harmed by construction activities, work will stop in the area and the County will notify CDFW. Upon authorization from CDFW, a qualified biologist may relocate the individual(s) the shortest distance possible to a location containing habitat outside of the work area (see also SP-2).

Biology	Auditory or Visual Disturbance Raptors and Migratory Birds: If construction occurs during the nesting season (February 1 through August 31), a qualified biologist will conduct a preconstruction survey of the BSA including a buffer of 50 feet for passerines/non-raptor migratory birds and 300 feet for raptors, as access is available, to locate active bird nests and identify measures to protect the nests. The preconstruction survey will be performed no more than 14 days prior to the implementation of construction activities (including staging and equipment access).
	All nest avoidance requirements of the MBTA and California Fish and Game Code will be observed, for example, establishing appropriate protection buffers around active nests until young have fledged. CDFW will be contacted if a special-status species is discovered within the project limits within no less than 72 hours to determine the extent of a construction-free buffer zone to be established around the nest. The County will inform Caltrans when such an activity occurs.
Biology	Bat Surveys and Bat Root Deterrents: A preconstruction survey for bats will be performed before construction to determine bat species' presence and their use of the bridge. If bats are found to be using the structure and will be affected by project activities, then roosting deterrent measures may be implemented, in coordination with CDFW.
Biology	Survey and Removal of Nests: Preconstruction survey for nests of special-status bumble bee species will be conducted by a qualified biologist. If bumble bee nests are found, they will be demarcated with exclusion fencing within 10 feet of the nest such that direct and indirect effects on the nest can be avoided until the end of the flight season (i.e., after November 15).
Biology	Project Design: Minimize the need to establish new access routes by lowering equipment to the in-water work area from the bridge.
Biology	Pollution and Erosion Control: The stormwater pollution prevention plan (if applicable) will detail the implementation of temporary construction site best management practices during all phases of construction to avoid or minimize stormwater and water quality effects on surface water, groundwater, or domestic water supplies. Water quality inspectors will inspect construction areas to determine whether the best management practices are adequate and adjust them, if necessary. Strategies applicable to this project may include the following: • Soil stabilization: temporary fence (environmentally sensitive area-type); hydroseeding; geotextiles, mats, plastic covers, and
	erosion control blankets; hydraulic mulch • Sediment control: fiber rolls, silt fence, sediment trap, gravel bag berm, check dams, drainage inlet protection • Non-stormwater management: dewatering operations, material and equipment use over water, avoidance of potable water use • Waste management and materials pollution control: concrete waste management, material delivery and storage, material use, stockpile management, spill prevention and control, soil waste management, hazardous waste and/or contaminated soil management, and liquid waste management
	 The stormwater pollution prevention plan may include a construction site monitoring program detailing the monitoring and sampling to be completed during construction to verify the

	effectiveness of the temporary construction site best management practices.
Biology	Hazardous Materials Safety: Take precautions to prevent spills or exposures to hazardous materials. Prior to bridge deck work the contractor will be required to perform an Initial Site Investigation (ISA) for Asbestos Containing Material (ACM), Treated Wood Waste (TWW), and Lead Containing Paints (LCP).
Biology	Temporary Access Roads and Paths: Use existing access roads and paths preferentially. The project does not propose the establishment of new access roads. After construction, temporary access paths and staging areas will be decommissioned (stabilize the soil, revegetate). De-compact drainage areas, pull fill material onto the running surface, and reshape to match the original contours.
Biology	Equipment, Vehicles, and Power Tools: Minimize damage to natural vegetation and permeable soils. Clean equipment to prevent leaks or debris entering waterbodies.
Biology	Dust Abatement: Use dust abatement measures commensurate with site conditions.
Biology	Construction Discharge Water: Avoid or minimize pollutants discharged to waterbodies in dewatering return water. Detain and treat water from dewatering prior to discharge to surface water.
Biology	Biologist Authority to Stop Construction: During construction, a qualified biologist will have the authority to halt work through coordination with the Resident Engineer if a protected species were discovered within the project footprint. The Resident Engineer will confirm construction activities remain suspended in any construction area where the qualified biologist has determined that a potential direct impact on a protected species could occur. Work will resume once the animal leaves the site voluntarily, is removed by the biologist to a release site using agency-approved handling techniques, or is determined to not be at risk from construction activities.
Biology	Site Restoration: Restore any substantial disturbance of the stream channel. Remove waste. Restore all temporary access paths and staging areas (as applicable). Loosen compacted soil areas. Stabilize soils. Control invasive plants (see GC-12).
Biology	Control Invasive Weeds: In the event that species ranked by the Cal-IPC as medium- or high-priority invasive weeds are disturbed or removed during construction-related activities, the contractor will contain the plant material and dispose of it in a manner that will not promote the spread of the species. The contractor will be responsible for obtaining all permits, licenses, and environmental clearances for properly disposing of materials. Areas subject to noxious weed removal or disturbance will be replanted with a local native seed mix. If seeding is not possible, the area will be covered to the extent practicable with heavy, black plastic solarization material until the end of the project. The project will be managed to reduce and minimize the propagation of invasive weeds.
Biology	Work Area Isolation: Isolate any work area within the wetted channel from the active stream whenever FESA-listed fish are reasonably certain to be present.

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Biology	In-water Work Window: Perform in-water work during dates recommended by resource agencies. In-water work for the proposed project will occur between July 15 and October 15.
Biology	Dewatering and Species Rescue: Prior to and during dewatering, native fish and other aquatic vertebrates within the area to be dewatered will be relocated to appropriate areas out of the construction area. Any relocation of species of special concern or other animals for movement out of harm's way would be subject to approval by CDFW through a Lake and Streambed Alteration Agreement.
	Reintroduction of streamflow into dewatered areas will be gradual to the isolated work area to prevent stranding of aquatic species, channel instability, or excessive scour. The qualified biologist will monitor upstream and downstream reaches to ensure that no aquatic species are stranded or in distress during reintroduction of flows. If conditions causing or contributing to stress and/or injury are observed, then immediate remedial actions will be taken that will be directed at reducing sources of stress. This may include a more gradual reintroduction of flows to avoid abrupt water surface elevation changes both downstream and upstream of the BSA.
	Cofferdams or stream diversions that fail for any reason will be repaired immediately as safety allows. During the installation and removal of the dewatering system, the qualified biologist will be onsite to monitor the activities.
Biology	Fish Capture and Relocation: Fish exclusion and capture will be performed by a qualified fisheries biologist using techniques, including approved NOAA Fisheries protocols, to minimize take. Electrofishing will be used as a last resort during fish capture and relocation. Fish capture and relocation will be monitored and reported to regulatory agencies.
	Dewatering and fish relocation activities will adhere to the following:
	1. Guidelines for dewatering: • In those specific cases where it is deemed necessary to work in flowing water, the work area will be isolated, and all flowing water will be temporarily diverted around the work site to maintain downstream flows during construction.
	• Exclude fish from occupying the work area by blocking the stream channel above and below the work area with fine-meshed net or screens. Mesh will be no greater than 1/8-inch diameter. The bottom of a seine must be completely secured to the channel bed. Screens must be checked twice daily and cleaned of debris to permit free flow of water. Block nets will be placed and maintained throughout the dewatering period at the upper and lower extent of the areas where fish will be removed. Block net mesh will be sized to ensure salmonids upstream or downstream do not enter the areas proposed for dewatering between passes with the electrofisher or seine.
	Prior to dewatering, determine the best means to bypass flow through the work area to minimize disturbance to the channel and avoid direct mortality of fish and other aquatic vertebrates.
	• Coordinate dewatering with a qualified biologist to perform fish and amphibian relocation activities. The qualified biologist(s) should be familiar with the life history and identification of listed salmonids and listed amphibians within the BSA.
	• Minimize the length of the dewatered stream channel and duration of dewatering, to the extent practicable.

- Any temporary dam or other artificial obstruction constructed should only be built from materials such as sandbags or clean gravel, which will cause little or no siltation.
- Visqueen will be placed over sandbags used for construction of cofferdams to minimize water seepage into the construction areas.
 Visqueen will be firmly anchored to the streambed to minimize water seepage. Cofferdams and stream diversion systems will remain in place and fully functional throughout the construction period.
- When cofferdams with bypass pipes are installed, debris racks will be placed at the bypass pipe inlet. Bypass pipes will be monitored periodically during construction. All accumulated debris will be removed.
- Bypass pipes will be sized to accommodate, at a minimum, twice the summer baseflow.
- The work area may need to be periodically pumped dry of seepage. Place pumps in flat areas, well away from the stream channel. Secure pumps to prevent movement by vibration. Refuel in an area well away from the stream channel and place fuel-absorbent mats under pump while refueling. Pump intakes will be covered with 1/8-inch mesh to prevent potential entrainment of fish or amphibians that failed to be removed. Check intake periodically for impingement of fish or amphibians.
- If pumping is necessary to dewater the in-water work area, procedures for pumped water will include requiring a temporary siltation basin for treatment of all water prior to entering any waterway and not allowing oil or other greasy substances originating from operations to enter or be placed where they could enter a wetted channel.
- Discharge sediment-laden water from construction area to an upland location or settling pond where it will not drain sediment-laden water back to the stream channel.
- When construction is complete, the flow diversion structure will be removed as soon as possible in a manner that will allow flow to resume with the least disturbance to the substrate. Cofferdams will be removed so surface elevations of water impounded above the cofferdam will not be reduced at a rate greater than 1 inch per hour. This will minimize the probability of fish stranding as the area upstream becomes dewatered.

2. General conditions for fish capture and relocation.

- Fish relocation and dewatering activities will occur between July 15 and October 15.
- All seining, electrofishing, and relocation activities should be performed by a qualified fisheries biologist. The qualified biologist will capture and relocate listed salmonids prior to construction of the water diversion structures (e.g., cofferdams). The qualified biologist will note the number of salmonids observed in the affected area, the number and species of salmonids relocated, where they were relocated to, and the date and time of collection and relocation. The qualified biologist will have a minimum of 3 years field experience in the identification and capture of salmonids, including juvenile salmonids, considered in this NES. The Qualified Biologist must be approved and/or permitted for handling of Endangered/Threatened species by the appropriate agencies. The qualified biologist will adhere to the following requirements for capture and transport of salmonids:

- Determine the most efficient means for capturing fish (i.e., seining, dip netting, trapping, electrofishing). Complex stream habitat generally requires the use of electrofishing equipment, whereas in outlet pools, fish may be concentrated by pumping down the pool and then seining or dipnetting fish.
- Notify NOAA Fisheries one week prior to capture and relocation of salmonids to provide NOAA Fisheries an opportunity to monitor.
- Initial fish relocation efforts will be conducted several days prior to the start of construction. This provides the fisheries biologist an opportunity to return to the work area and perform additional electrofishing passes immediately prior to construction. In many instances, additional fish will be captured that eluded the previous day's efforts.

Prior to capturing fish, determine the most appropriate release location(s). Consider the following when selecting release site(s):

- Similar water temperature as capture location.
- · Ample habitat for captured fish.
- Low likelihood of fish re-entering work site or becoming impinged on exclusion net or screen.
- Fish must be released in a nearby location within the same Hydrologic Unit Code 8 watershed.
- Periodically measure air and water temperatures. Cease activities when measured water temperatures exceed 17.8 degrees Celsius.
 Temperatures will be measured at the head of riffle tail of pool interface.
- **3. Electrofishing Guidelines.** The following methods will be used if fish are relocated via electrofishing.

Electrofishing will only be used as a last-resort fish-capture method.

- All electrofishing will be conducted according to NOAA Fisheries Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act (2000). The backpack electrofisher will be set as follows when capturing fish:
- Voltage setting on the electrofisher will not exceed 300 Volts.

Initial Maximum

Voltage: 100 Volts 300 Volts

Duration: 500 microseconds 5 milliseconds

Frequency: 30 Hertz 70 Hertz

- A minimum of three passes with the electrofisher will be conducted to ensure maximum capture probability of salmonids within the area proposed for dewatering.
- No electrofishing will occur if water conductivity is greater than 350 microSiemens per centimeter or when instream water temperatures exceed 17.8 degrees Celsius. Water temperatures will be measured at the pool/riffle interface. Direct current will be used.
- **4. Seining guidelines.** The following methods will be used if fish are removed with seines.
- A minimum of three passes with the seine will be used to ensure maximum capture probability of salmonids within the area.
- All captured fish will be processed and released prior to each subsequent pass with the seine.
- The seine mesh will be adequately sized to ensure fish are not gilled during capture and relocation activities.

- **5. Guidelines for relocation of salmonids.** The following methods will be used during relocation activities associated with either method of capture (electrofishing or seining):
- Salmonid fish should not be overcrowded into buckets, allowing approximately 6 cubic inches per young-of-the-year (0+) individual and more for larger fish.
- Every effort will be made not to mix 0+ salmonids with larger salmonids, or other potential predators. Have at least two containers and segregate 0+ fish from larger age classes. Place larger amphibians, such as Pacific giant salamanders, in container with larger fish.
- Salmonid predators, such as sculpins (Cottus sp.) and Pacificgiant salamanders (Dicamptodon ensatus) collected and relocated during electrofishing or seining activities will be relocated so as to not concentrate them in one area.
- All captured salmonids will be relocated, preferably upstream, of the proposed construction project and placed in suitable habitat. Captured fish will be placed into a pool, preferably with a depth of greater than 2 feet with available instream cover.
- All captured salmonids will be processed and released prior to conducting a subsequent electrofishing or seining pass.
- All native captured fish will be allowed to recover from electrofishing before being returned to the stream.
- Minimize handling of salmonids. When handling is necessary, always wet hands or nets prior to touching fish. Handlers should not wear DEET-based insect repellants.
- Temporarily hold fish in cool, shaded, aerated water in a container with a lid. Provide aeration with a battery-powered external bubbler. Protect fish from jostling and noise, and do not remove fish from this container until time of release.
- Place a thermometer in holding containers and, if necessary, periodically conduct partial water changes to maintain a stable water temperature. If water temperature reaches or exceeds 18 degrees Celsius, fish will be released and rescue operations ceased.
- In areas where aquatic vertebrates are abundant, periodically cease capture, and release at predetermined locations.
- Visually identify species and estimate year-classes of fishes at time of release. Record the number of fish captured. Avoid anesthetizing or measuring fish.

If more than 3 percent of the salmonids captured are killed or injured, the project lead will contact NOAA Fisheries. The purpose of the contact is to allow the agencies a courtesy review of activities resulting in take and to determine if additional protective measures are required. All salmonid mortalities must be retained; placed in an appropriately sized whirl-pak or zip-lock bag; labeled with the date and time of collection, fork length, and location of capture; and frozen as soon as possible. Frozen samples must be retained until specific instructions are provided by NOAA Fisheries.

Biology

Fish Screens

- Screen Approach Velocity: The approach velocity must not exceed 0.40 feet per second for active screens. Using this approach velocity will minimize screen contact and/or impingement of juvenile fish.
- Effective Screen Area: The minimum effective screen area must be calculated by dividing the maximum screened flow

	by the allowable approach velocity (0.40 feet per second for active screens).		
	 Material: The screen material must be corrosion resistant and sufficiently durable to maintain a smooth uniform surface with long-term use. 		
	Other Components: Other components of the screen facility (such as seals) must not include gaps greater than the maximum screen opening defined above.		
	 Open Area: The percent open area for any screen material must be at least 27 percent. 		
Biology	Vegetation Trimming: To avoid potential injury or mortality to foothill yellow-legged frogs using vegetated areas for cover along the Salmon River, initial vegetation trimming (i.e., willows within the staging area east of the bridge) will be done manually using hand tools (e.g., lopper, pruning shears). The vegetation will be trimmed and removed from the work area by hand.		
Biology	Auditory or Visual Disturbance NSO: a. No proposed activity generating sound levels 20 or more decibels above ambient sound levels or with maximum sound levels (ambient sound level plus activity-generated sound level) above 90 decibels (excluding vehicle back-up alarms) may occur within suitable spotted owl nesting/roosting habitat during the majority of the nesting season (i.e., February 1 to July 9; USFWS 2020b). These above-ambient sound-level restrictions will be lifted after July 31, after which USFWS considers the above-ambient sound levels as having "no effect" on nesting spotted owls and dependent young.		
	b. No human activities will occur within a visual line-of-sight of 40 meters (131 feet) or less from any known nest locations within the BSA (USFWS 2020b).		
Biology	Removal of Temporary Work Platforms: Upon completion of construction activities, any temporary work platforms will be removed and any gravel used during construction will be spread in a manner that will allow future flow to resume with the least disturbance to the substrate. Alteration of the streambed will be minimized to the maximum extent possible.		
Water Quality	Measure #1 – Prevention of Accidental Spills: Construction specifications will include the following measures to minimize the potential for adverse effects resulting from accidental spills of pollutants (e.g., fuel, oil, grease): A spill prevention plan shall be implemented for potentially hazardous materials. The plan will include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms will be constructed to prevent spilled materials from reaching surface water features.		

Water Quality

Measure #2 General Measures for Protection of Specialstatus Wildlife Species: The following will be implemented to avoid or minimize the potential for adverse effects on water quality or special-status wildlife species:

- Construction access and equipment will be located on existing roads or previously disturbed parking areas.
- The contractor will deploy a temporary silt curtain to contain and minimize downstream turbidity impacts for the short duration required to remove the small amount of cobble and debris that has deposited on the flat concrete pile cap.
- The cofferdam will remain dewatered throughout construction and will offer secondary containment to protect aquatic resources.
- Disturbance of soil, vegetation, naturally occurring debris piles (including fallen trees or dead tree snags), and wildlife burrows will be avoided or minimized to the extent possible.

Cultural

Any construction work occurring on this project between May 1 and August 1 will have the potential for adverse effects under Section 106 of the National Historic Preservation Act. Any work between May 1 and August 1 will require additional environmental review, reopening the Section 106 process to include consultation with Caltrans' Cultural Studies Office (CSO), the State Historic Preservation Officer (SHPO), the Karuk THPO, and the Ihuk ceremonial leaders. The Karuk Tribe, Siskiyou County, and Caltrans agreed that any work occurring on this project between May 1 and August 1 will require close coordination with the Karuk THPO and the Ihuk ceremonial leaders to determine which (if any) days would require ceasing operations to protect the solitude of ceremonial practitioners conducting Ihuk or associated ceremonies. One to three periods of 3 to 6 days each may require operational avoidance in this timeframe and also may result in re-opening the Section 106 process. The Tribe was not concerned about work before May 1 or after August 1 causing any impacts on ceremonial activities.

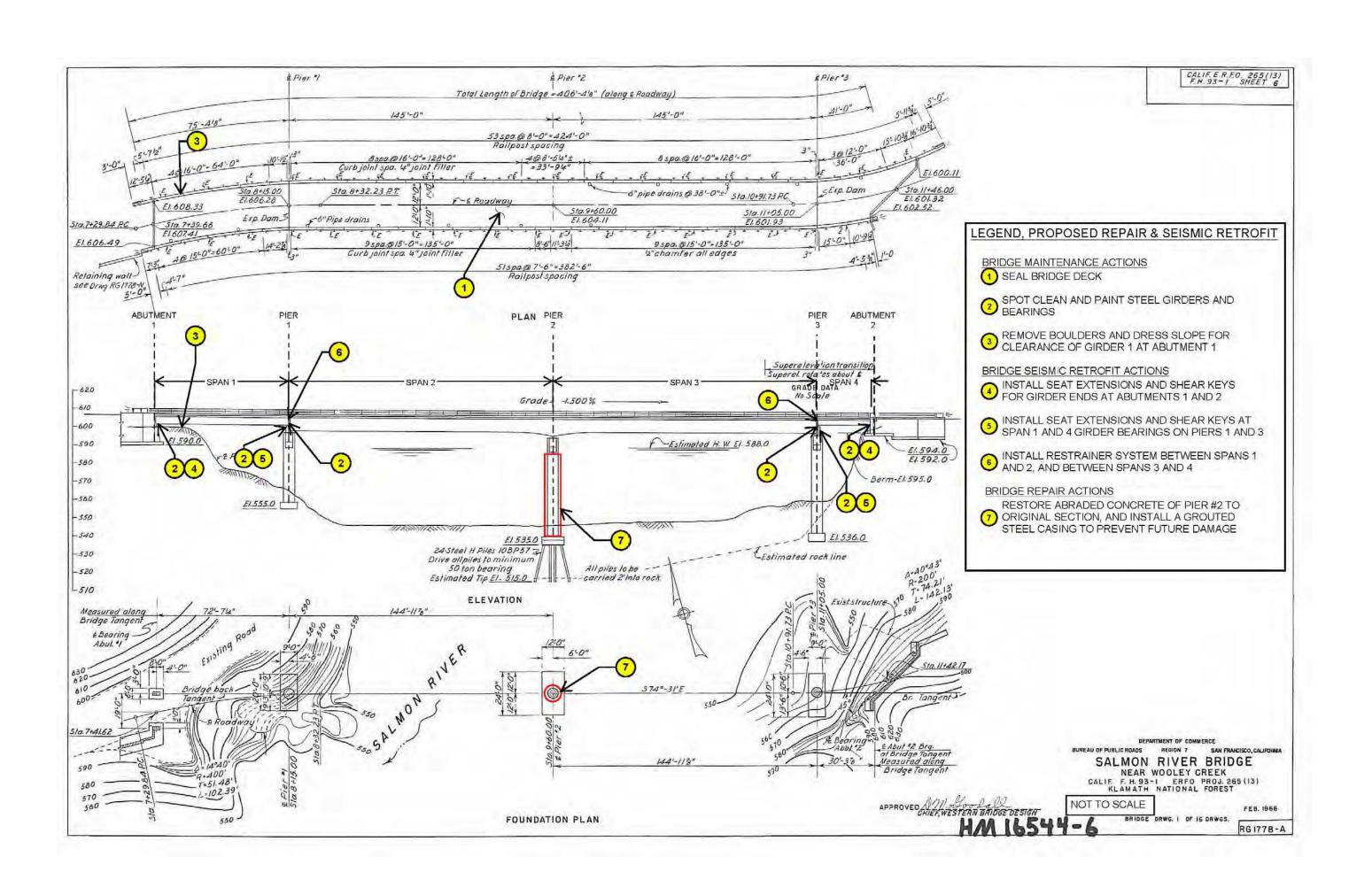
POSSIBLE IMPACTS:

A review of this project in compliance with the *California Environmental Quality Act* (*CEQA*) indicates that there may be adverse impacts to the environment; however, those impacts can be mitigated to an insignificant level by implementing the mitigation measures identified in this Initial Study/Mitigated Negative Declaration.

PREPARED BY:

Kyla Burton on November 1, 2022. Copies are available for review at the Siskiyou County Public Works Department, 1312 Fairlane Road, Yreka, California.

APPENDIX A – PRELIMINARY DESIGN DRAWING





Listed and Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Biological Study Area

Common Name	Scientific Name	Listing Status FESA/CESA/State	General Habitat Description	Habitat Assessment	Potential for Occurrence
PLANTS					
Marble Mountain campion	Silene marmorensis	—/—/ CRPR 1B.2	Broadleaved upland forest, lower montane coniferous forest, cismontane woodland, and chaparral. Generally found in forest openings with little vegetation, shady areas, often along trails; can be on serpentine soils. CNDDB has extant occurrences within a 5-mile radius of the BSA.	The BSA is within the confirmed range for this species, and suitable habitat may exist, depending on suitability of soils.	Low. This species has a low potential for occurrence in the BSA and vicinity.
robust false lupine	Thermopsis robusta	—/—/ CRPR 1B.2	North Coast coniferous forest, broadleaved upland forest. Generally, found on ridgetops, sometimes on serpentine soils. CNDDB has extant occurrences within a 5-mile radius of the BSA.	The BSA is just outside of the confirmed and possible range. Known locations are west of Somes Bar, approximately 5 miles from the BSA. The project is not located on a ridgetop.	Low. This species is unlikely to occur in the BSA and vicinity.
porcupine sedge	Carex hystericina	—/—/ CRPR 2B.1	Grows in wet habitats such as marshes and swamps (streambanks). The nearest CNDDB occurrence is along Highway 96, 2 miles north of Somes Bar, within a 5-mile radius of the BSA.	The BSA is located in the presumed range. No marshes or swamps are found in the BSA and vicinity. There are moist stream edges where sedges may occur.	Low. This species is unlikely to occur in the BSA and vicinity.
giant fawn lily	Erythronium oregonum	—/—/ CRPR 2B.2	Found primarily in openings in cismontane woodland, meadows, and seeps. Sometimes on serpentine soils; rocky sites.	No meadows or seeps are in the project footprint.	Low. This species is unlikely to occur in the BSA and vicinity.

Common Name	Scientific Name	Listing Status FESA/CESA/State	General Habitat Description	Habitat Assessment	Potential for Occurrence		
			The nearest CNDDB occurrence is where the Salmon River is crossed by Highway 96, within a 5-mile radius of the BSA.				
white-flowered rein orchid	Piperia candida	—/—/ CRPR 1B.2	North Coast coniferous forest, lower montane coniferous forest, broadleaved upland forest. Sometimes on serpentine. Forest duff, mossy banks, rock outcrops, and muskeg. The nearest CNDDB occurrence is close to Steinacher Creek, within a 5-mile radius of the BSA.	Marginal habitat is in project vicinity; it did not appear to be moist enough in the BSA to support orchids. The BSA has very little forest duff and little moss on banks.	None. This species would not occur in the BSA or vicinity.		
CRUSTACEANS							
Shasta crayfish	Pacifastacus fortis	FE/SE	Lives in cool, clear, spring-fed lakes, rivers, and streams, usually at or near a spring inflow source, where waters show little annual fluctuation in temperature and remain cool during the summer.	There are only seven remaining populations of the Shasta crayfish left and are found only in Shasta County, California, in the Pit River drainage and two tributary systems, Fall River and Hat Creek drainages.	None. This species would not occur in the BSA or vicinity.		
vernal pool fairy shrimp	Branchinecta lynchi	FT/—	Found in vernal pools, seasonal wetlands, and stagnant ditches that fill with water during fall and winter rains and dry up in spring and summer.	No vernal pools are within the BSA or vicinity.	None. This species would not occur in the BSA or vicinity.		
FISH							
Southern Oregon/Northern California Coast ESU coho salmon	Oncorhynchus kisutch	FT/ST	Requires cool, swift, shallow water; clean, loose gravel for spawning; and runs and suitable large pools in which to rear and over-summer.	The BSA contains potential spawning, rearing, and migration habitat. Critical habitat is	High. This species is presumed to be present in the BSA and vicinity.		

Common Name	Scientific Name	Listing Status FESA/CESA/State	General Habitat Description	Habitat Assessment	Potential for Occurrence		
				present in the BSA.			
Upper Klamath and Trinity River ESU Chinook salmon	Oncorhynchus tshawytscha	FC/SC/SSC	Requires cool, swift, shallow water; clean, loose gravel for spawning; and runs and suitable large pools in which to hold or rear over the summer.	The BSA contains potential spawning, rearing, and migration habitat.	High. This species is known to seasonally occur in the BSA.		
Klamath Mountains Province DPS steelhead trout	Oncorhynchus mykiss irideus	—/—/SSC	Requires cool, swift, shallow water; clean, loose gravel for spawning; and runs and suitable large pools in which to rear and over-summer.	The BSA contains potential spawning, rearing, and migration habitat.	High. This species is known to seasonally occur in the BSA.		
green sturgeon northern DPS	Acipenser medirostris	/_/SSC	Primarily estuarine and marine; spawn and rear for a limited time in fresh water. Found in larger rivers such as the Sacramento and Klamath.	The BSA contains migration habitat for adults and juveniles. Green sturgeon have been documented spawning in the Salmon River, and juveniles have been observed in outmigrant fish traps at the mouth of the Salmon River.	High. This species is presumed to be present in the BSA and vicinity.		
Pacific lamprey	Entosphenus tridentatus	—/—/SSC	Requires cool, swift, shallow water; clean, loose gravel for spawning; and slow backwater areas with silty bottom for rearing of larval ammocoetes.	The BSA contains potential spawning and migration habitat.	High. This species is presumed to be present in the BSA and vicinity.		
AMPHIBIANS							
foothill yellow- legged frog	Rana boylii	—/—/SSC This clade is not listed under CESA.	Requires partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobblesized substrate for egg laying. CNDDB has several extant occurrences	The BSA contains potential habitat on the margins of the Salmon River and extending into the adjacent riparian and upland areas.	High. This species (adults) was observed during the habitat assessment survey.		

Common Name	Scientific Name	Listing Status FESA/CESA/State	General Habitat Description	Habitat Assessment	Potential for Occurrence
			within a 5-mile radius of the BSA.		
Pacific tailed frog	Ascaphus truei	—/—/SSC	Inhabits cold, clear, permanent rocky streams in wet forests. They do not inhabit ponds or lakes. A rocky streambed is necessary for protective cover for adults, eggs, and larvae. Nearest CNDDB occurrence is on the South Fork of Natuket Creek, tributary to the Klamath River within a 5-mile radius of the BSA.	Potentially suitable habitat is present, although the Klamath Forest is not considered wet.	Low. This species is unlikely to occur in the BSA and vicinity.
BIRDS					
American peregrine falcon	Falco peregrinus anatum	DL/DL/FP	Found near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds. Also uses human-made structures. Nest consists of a scrape or a depression dug in gravel on a cliff ledge. CNDDB has extant occurrences within a 5-mile radius of the BSA.	Suitable nesting habitat is found on cliff faces in the Salmon River canyon but not in the BSA. Species may forage or move through the BSA.	Low. This species is unlikely to nest in the BSA or vicinity and would not be affected by project activities.
northern spotted owl	Strix occidentalis caurina	FT/ST	Inhabits forests characterized by mature and old-growth trees with dense, multi-layered canopies, abundant logs, standing snags, and live trees with broken tops. The spotted owl database contains records of 15 northern spotted owl sites within 5 miles of the BSA.	No suitable nesting habitat is in the BSA and immediate vicinity. Species may forage or move through the BSA.	Low. This species has a low potential for occurrence in the BSA and vicinity, and with the implementation of proposed avoidance and minimization measures, is unlikely to be affected by project activities.
western yellow- billed cuckoo	Coccyzus americanus occidentalis	FT/SE	Uses a variety of riparian habitats. Cottonwood and willow trees are an important foraging habitat in California. Appears to require	No suitable nesting habitat is found in the BSA and vicinity.	None. This species would not occur in the BSA or vicinity.

Common Name	Scientific Name	Listing Status FESA/CESA/State	General Habitat Description	Habitat Assessment	Potential for Occurrence
			large blocks of riparian habitat for nesting.		
INSECTS					
Western Bumble bee	Bombus occidentalis	—/SC	Nests occur primarily in underground cavities such as old squirrel or other animal nests and in open west-southwest slopes bordered by trees. Requires plants that bloom and provide adequate nectar and pollen throughout the colony's life cycle, which is generally from early February to late November. Little is known about overwintering sites. CNDDB has two extant occurrences along the Salmon River Road within a 5-mile radius of the BSA.	Difficult to determine species without collection. Potentially suitable habitat and food sources are in the BSA and vicinity.	Moderate. This species has a moderate potential for occurrence in the staging areas of the BSA and vicinity.
MAMMALS		L	L		
fisher – West Coast DPS	Pekania pennanti	FE/ST/SSC	Permanent resident of Sierra Nevada, Cascades, Klamath Mountains, and the North Coast Range. Occurs above 3,200 feet in the Sierra Nevada and Cascades. Prefers coniferous or deciduous riparian habitats with intermediate to large trees and closed canopies. Dens in tree/log cavities and brush piles. Mostly nocturnal. Needs large areas of mature, dense forest. CNDDB has several older (1970s) occurrences within a 5-mile radius of the BSA.	More typical in dense, old growth forest with closed canopy. Vegetation within the BSA is not considered suitable for the species. May occur in denser/taller coniferous forest in other areas of the Salmon River canyon. The BSA is below the elevation range of this species.	Low. This species is unlikely to occur in the BSA and vicinity.
Townsend's big- eared bat	Corynorhinus townsendii	_/_/SSC	Found throughout California in a wide	An unknown species of bat	Low. This species is

Common Name	Scientific Name	Listing Status FESA/CESA/State	General Habitat Description	Habitat Assessment	Potential for Occurrence
			variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Extremely sensitive to human disturbance. CNDDB has two extant occurrences within a 5-mile radius of the BSA.	was observed at the north abutment area but was likely not Townsend's because of roost habitat characteristics. This species has the potential to roost in caves/crevices in the area.	unlikely to occur in the BSA and vicinity.
gray wolf	Canis lupus	FE/SE	Wolves are habitat generalists and historically occupied diverse habitats in North America, including tundra, forests, grasslands, and deserts. Their primary habitat requirements are the presence of adequate ungulate prey and water.	Suitable habitat may exist in the vicinity of the proposed project. No known packs or individuals have been tracked in the vicinity of the project.	Low. This species is unlikely to occur in the BSA and vicinity.
North American wolverine	Gulo luscus	FPT/ST/FP	Occur within a wide variety of habitats, primarily boreal forests, tundra, and western mountains throughout Alaska and Canada. Individual wolverines have also moved into historic range in the Sierra Nevada Mountains of California and the Southern Rocky Mountains of Colorado but have not established breeding populations in these areas.	Extremely rare. Dispersal habitat may exist in the BSA and vicinity.	Low. This species is unlikely to occur in the BSA and vicinity.

Status:

DL = delisted FC = Federal Candidate

FE = Federal Endangered

FP = State Fully Protected

FPT = Federal Proposed

FT = Federal Threatened

SC = State Candidate

SE = State Endangered

SSC = State Species of Special Concern

ST = State Threatened

	Scientific	Listing Status	General Habitat	Habitat	Potential for
Common Name	Name	FESA/CESA/State	Description	Assessment	Occurrence

California Rare Plant Rank (CRPR):

- 1B.2 = rare, threatened, or endangered in California and elsewhere, fairly threatened in California (20 to 80% occurrences threatened / moderate degree and immediacy of threat)
- 2B.1 = rare, threatened, or endangered in California but more common elsewhere, seriously threatened in California (more than 80% of occurrences threatened / high degree and immediacy of threat)
- 2B.2 = rare, threatened, or endangered in California but more common elsewhere, Fairly threatened in California (20 to 80% occurrences threatened / moderate degree and immediacy of threat)

Notes:

DPS = distinct population segment (defined as a vertebrate population or group of populations that is discrete from other populations of the species and significant in relation to the entire species)





UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE West Coast Region 1655 Heindon Road Arcata, California 95521-4573

February 23, 2022 Refer to NMFS No: WCRO-2022-00045

Mr. Chris Fazzari Senior Environmental Planner Caltrans District 2 Local Assistance 1657 Riverside Drive (MS#5) Redding, California 96001

Re: Endangered Species Act Section 7(a)(2) Concurrence Letter and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Wooley Creek Bridge Seismic Retrofit and Repair Project (Caltrans File No. BRLO 5902 (080))

Dear Mr. Fazzari:

On January 6, 2022, NOAA's National Marine Fisheries Service (NMFS) received your request for written concurrence that the California Department of Transportation's (Caltrans¹) proposed Wooley Creek Bridge Seismic Retrofit and Repair Project (Project) is not likely to adversely affect (NLAA) species listed as threatened or endangered, or critical habitats designated under the Endangered Species Act (ESA). This response to your request was prepared by NMFS pursuant to section 7(a)(2) of the ESA and implementing regulations at 50 CFR 402. Thank you also for your request for consultation pursuant to the essential fish habitat (EFH) provisions in Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 U.S.C. 1855(b)) for this action. We agree that the proposed action may adversely affect EFH for Pacific salmonids; however, we have determined that the potential effects would be short-term, minor, and are adequately addressed in the proposed action. Therefore, we have not provided any EFH Conservation Recommendations.

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). The document will be available within two weeks at the Environmental Consultation Organizer [https://appscloud.fisheries.noaa.gov/]. A complete record of this consultation is on file at the Northern California Office in Arcata, California.

¹ Pursuant to 23 USC 327, and through a series of Memorandum of Understandings beginning June 7, 2007, the Federal Highway Administration (FHWA) assigned and Caltrans assumed responsibility for compliance with Section 7 of the federal Endangered Species Act (ESA) and the Magnuson-Stevens Fishery Conservation and Management Act (MSA) for federally-funded transportation projects in California. Therefore, Caltrans is considered the federal action agency for consultations with NMFS for federally funded projects involving FHWA. Caltrans proposes to administer federal funds for the implementation of the proposed action, and is therefore considered the federal action agency for this consultation.



Proposed Action

Caltrans proposes to repair the in-channel pier and perform various seismic stabilization measures and other maintenance at the Wooley Creek Bridge over the Salmon River on Salmon River Road at Post Mile 3.0. Maintenance work includes sandblasting and sealing the bridge deck with a methacrylate resin. The contractor will lower workers, equipment, and materials from the existing bridge deck to a temporary staging area on a vegetated sandbar. Access to the pier foundation will be a walkway formed from a gravel berm or a series of large gravel bags in the shallow portion of the river between the sandbar and pier. Trimming of willow shrubs would occur on the sandbar. Following construction, Caltrans proposes to revegetate and restore the contours of the sandbar.

Caltrans proposes to implement the following avoidance and minimization measures as part of the proposed action:

- 1. Instream construction will occur between July 15 and October 15 when streamflow is lowest and water temperatures are highest to avoid the presence of Southern Oregon/Northern California Coast (SONCC) coho salmon (*Oncorhynchus kisutch*).
- 2. Best management practices (BMPs) will be implemented during construction activities to protect water quality. Specifically, measures to minimize the discharge of sediment and eliminate the discharge of pollutants to the river will be implemented. For instance, the BMPs require that all equipment is free of leaks, that deck sealant and sandblasting be fully contained, and that refueling, maintenance, and staging occur on the roadway well above and away from the river.
- 3. The contractor will construct a cofferdam around the pier to provide a dry work, which may require removal of aquatic species. However, we do not expect coho salmon to be present.
- 4. Imported gravel used for the access berm will be washed spawning-size gravel consisting of uncrushed, rounded river rock with minimal sharp edges. The gravel would remain in the riverbed following construction. However, the height of the berm would be reduced to the summer water level by spreading the material, and breaches would be made in the berm so that streamflow is not redirected or obstructed when flows rise.

The Project is described in detail in Caltrans' Biological Assessment (Caltrans 2021).

Action Area

The proposed action will occur in and on the banks of the Salmon River in Trinity County, California. The action area is about 400-feet long perpendicular to the river and includes the linear extent of the Wooley Creek Bridge over the Salmon River on Salmon River Road. The action area also includes the riverbed directly under the bridge on the east side of the river between the sandbar and the pier, as well as the extent of downstream turbidity, which Caltrans estimates to be 300 feet.

During the proposed work season, the section of the Salmon River within the action area is expected to be too warm to support rearing coho salmon as indicated by temperature data provided by the Karuk Tribe (Soto 2021), and by the action area being within the "temperature mask" zone described in the SONCC Coho Salmon Recovery Plan (NMFS 2014), which indicates the action area is inherently too warm to support rearing coho salmon. Therefore,

instream construction will occur during a time period when juvenile SONCC coho are extremely unlikely to be present. Adult coho salmon may enter the action during the first high flows of the season based on their presence in the middle Klamath River near the Salmon River confluence in October (NMFS 2014).

Action Agency's Effects Determination

The action area provides habitat for threatened SONCC coho salmon (70 FR 52488) and designated critical habitat for this species (64 FR 24049). Caltrans determined the proposed action "may affect, but is not likely to adversely affect SONCC coho salmon." This determination is based on the implementation of avoidance and minimization measures, in particular restricting the proposed activities to when coho salmon presence within the action area is unlikely.

Consultation History

Due to COVID-19 travel restrictions, staff from NMFS were unable to visit the Project location.

On July 10, 2020, Chris Fazzari (Caltrans) emailed Mike Kelly (NMFS) with notification of the proposed Project and a Preliminary Environmental Study for the Project.

On July 15, 2020, Mike Kelly emailed Chris Fazzari with questions about site access, any pile-driving impacts, and a potential fish relocation plan.

On December 2, 2020, Chris Fazzari provided a preliminary draft BA, which concluded that the Project was likely to adversely affect SONCC coho salmon and its designated critical habitat. Caltrans also requested technical assistance from Mike Kelly.

On December 3, 2020, Mike Kelly provided comments on the preliminary draft BA.

On June 7, 2021, Caltrans obtained an official species list from NMFS.

On September 24, 2021, Chris Fazzari provided a second draft BA. Mike Kelly provided comments the same day.

On October 19, 2021, Mike Kelly, Chris Fazzari, and the County's consulting biologists met to discuss comments on the draft BA and Project construction elements. At this time Caltrans decided to reconsider its conclusion that the Project would be likely to adversely affect SONCC coho salmon and its designated critical habitat.

On January 5, 2022, Caltrans requested informal ESA section 7 consultation and concluded that the Project may affect but is not likely to adversely affect SONCC coho salmon and its designated critical habitat. Caltrans also concluded that the Project may adversely affect EFH.

On January 6, 2022, NMFS informed Caltrans that it had initiated informal ESA section 7 consultation.

ENDANGERED SPECIES ACT

Effects of the Action

Under the ESA, "effects of the action" means the direct and indirect effects of an action on the listed species or critical habitat, together with the effects of other activities that are interrelated or

interdependent with that action (50 CFR 402.02). The applicable standard to find that a proposed action is not likely to adversely affect listed species or critical habitat is that all of the effects of the action are expected to be discountable, insignificant, or completely beneficial. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or critical habitat. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Discountable effects are those extremely unlikely to occur.

When the cofferdam is constructed in July, water temperatures will be at their annual peak and above the tolerance level of juvenile coho salmon (NMFS 2014, Soto 2021), so the need to capture and relocate them will be extremely unlikely and discountable.

The Project creates the potential for minor turbidity increases during construction when the inwater walkway is constructed and when rocks are removed from the pier's pile cap, and when the pile cap is rewatered and the walkway removed or recontoured at the end of construction. Additionally, after construction is complete, fine sediment may potentially emanate from the disturbed sandbar, the walkway area, and the disturbed ground near the bridge abutments during the first rains and elevated flows of the season. However, we do not expect juvenile coho salmon to be present during construction, and we do not expect juvenile coho salmon to reenter the action area until the following spring when we expect the possibility of post-Project-related turbidity to be over. Therefore, juvenile coho salmon exposure to Project-related turbidity both during and after construction is extremely unlikely and discountable.

We also expect that construction-related and post-Project turbidity increases would be minor owing to the BMPs that are incorporated into the proposed action. Therefore, if adult coho salmon enter the action area during construction or after construction is complete, they could be exposed to minor turbidity. However, adult coho salmon are little affected by minor increases in turbidity (Newcome and Jensen 1996), and we do not expect Project-related turbidity to span the full channel width. Therefore, exposure to expected levels of turbidity would not produce any meaningfully measurable effect to adult coho salmon, and exposure would be insignificant.

Although the proposed action has the potential for chemical contamination of the Salmon River, both during and after construction, from machinery (*e.g.*, leaks of fuels, oils, etc.) and during construction from bridge deck sealant, such contamination is extremely unlikely due to the expected effectiveness of proposed BMPs and is therefore discountable.

The removal of willows and other vegetation on the sandbar will be minimal, and occur only within an area of approximately 40 feet by 30 feet. This loss of vegetation is also expected to be temporary because Caltrans proposes to replant any removed willows. Therefore, NMFS believes that this temporary loss of vegetation will not reduce the functional value of critical habitat in the action area, and any impact would be insignificant.

Additionally, as described above, the expected level of sediment delivery will be minor, and NMFS believes that any deposition will not reduce the functional value of critical habitat in the action area. Therefore, sediment delivery to the river would have insignificant impacts to critical habitat.

While repairs to the pier will extend the life of this instream obstruction, the pier does not appear to alter or influence the channel configuration or hydraulic conditions within this rocky section of the Salmon River. The existing pier's footprint will be increased by approximately five square feet as a result of the repairs, but this will not change the pier's influence on channel hydraulics

in any appreciable way. Thus, the continued presence of the pier is not expected to reduce the functional value of the action area as a migration corridor or rearing area, and impacts to critical habitat or individual coho salmon will therefore be insignificant.

The proposed action will not change the types or number of vehicles that may use the bridge; therefore, the proposed action will not cause any other activities.

Conclusion

Based on this analysis, NMFS concurs with Caltrans that the proposed action is not likely to adversely affect threatened SONCC coho salmon or their critical habitat within the action area of the Salmon River.

Reinitiation of Consultation

Reinitiation of consultation is required and shall be requested by Caltrans, or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and (1) the proposed action causes take; (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the written concurrence; or (4) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16). This concludes the ESA consultation.

MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

Section 305(b) of the MSA directs Federal agencies to consult with NMFS on all actions or proposed actions that may adversely affect EFH. Under the MSA, this consultation is intended to promote the conservation of EFH as necessary to support sustainable fisheries and the managed species' contribution to a healthy ecosystem. For the purposes of the MSA, EFH means "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity", and includes the associated physical, chemical, and biological properties that are used by fish (50 CFR 600.10). Adverse effect means any impact that reduces quality or quantity of EFH, and may include direct or indirect physical, chemical, or biological alteration of the waters or substrate and loss of (or injury to) benthic organisms, prey species and their habitat, and other ecosystem components, if such modifications reduce the quality or quantity of EFH. Adverse effects may result from actions occurring within EFH or outside of it and may include direct, indirect, sitespecific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions (50 CFR 600.810). Section 305(b) of the MSA also requires NMFS to recommend measures that can be taken by the action agency to conserve EFH. Such recommendations may include measures to avoid, minimize, mitigate, or otherwise offset the adverse effects of the action on EFH (50 CFR 600.905(b)).

Habitat Areas of Particular Concern (HAPC) are described in the regulations as subsets of EFH that are identified based on one or more of the following considerations: the importance of the ecological function provided by the habitat; the extent to which the habitat is sensitive to human-induced environmental degradation; whether, and to what extent, development activities are, or

will be stressing the habitat type; and the rarity of the habitat type (50 CFR 600.815(a)(8)). Designated HAPC are not afforded any additional regulatory protection under MSA; however, federal projects with potential adverse impacts to HAPC are more carefully scrutinized during the consultation process.

Essential Fish Habitat Affected by the Project

This analysis is based, in part, on the EFH assessment provided by Caltrans (Caltrans 2021) and descriptions of EFH from the Pacific Fishery Management Council (PFMC) for Pacific Coast Salmon (PFMC 2016) contained in the fishery management plan (FMP) developed by the PFMC and approved by the Secretary of Commerce.

The Project will occur within EFH for Pacific Coast Salmon. Furthermore, the Project is located in a HAPC for Pacific Coast Salmon FMP. As defined in the Pacific Salmon FMPs, the Project area represents the HAPC of complex channel and floodplain habitat.

Adverse Effects on Essential Fish Habitat

NMFS determined the proposed action would adversely affect Pacific Coast Salmon EFH as described above for effects to coho salmon critical habitat. Chinook salmon are expected to use habitat in the action area in the same manner as coho salmon, *i.e.*, as a juvenile and adult migration corridor, and as seasonal rearing habitat.

Caltrans must reinitiate EFH consultation with NMFS if the proposed action is substantially revised in a way that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH conservation recommendations (50 CFR 600. 920(1)).

Please direct questions regarding this letter to Mike Kelly, Fisheries Biologist, at Mike.Kelly@noaa.gov or at (707) 825-1622.

Sincerely,

Jeffrey Jahn

South Coast Branch Chief Northern California Office

cc: Copy to E-File: FRN 151422WCR2022AR00020

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